

THE RELATIONS BETWEEN UNIVERSITY STUDENTS' INTERNET ADDICTION AND SMART PHONE USAGE HABITS¹

ÜNİVERSİTE ÖĞRENCİLERİNİN İNTERNET BAĞIMLILIĞI İLE AKILLI TELEFON KULLANMA ALIŞKANLIKLARI ARASINDAKİ İLİŞKİLERİN İNCELENMESİ

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Abstract: A correlational research study was conducted to determine university students' Internet addiction levels and how it is associated to the students' daily smartphone usage. The participants of the study involved 298 university students in a state university in Istanbul, Turkey. The study results indicated that most of the participant students (43%) belong to the non-addicted group, while 26.8% of the students were addicted to the Internet and 30% of them were risky students, who have a potential to be addicted to the Internet. The results indicated that the university students' Internet addiction scores significantly differed with respect to the frequency of their daily mobile phone checking and gender, as male students have higher Internet addiction scores than females. Furthermore, there were positive correlations between university students' Internet addiction scores and their daily smartphone usage in hours. The results of the study would provide some advices for governmental organizations about how to deal with both problems by taking some preventive and corrective actions.

Keywords: *Internet addiction, university students, gender, smart phone usage, nomophobia.*

Özet: Üniversite öğrencilerinin internet bağımlılığı, düzeylerinin ve internet bağımlılığı ile akıllı telefon kullanımları arasındaki ilişkilerin incelendiği bu çalışmada ilikisel tarama deseni kullanılmıştır. Çalışmanın katılımcıları, İstanbul'da bulunan bir devlet üniversitesinde öğrenim gören öğrencilerdir. Çalışmanın sonuçları, incelendiğinde katılımcıların %43'ünün internete bağımlı olmayan grupta bulunduğu halde, %26.8'inin bağımlı grupta, %30'unun ise bağımlı, risk potansiyeli taşıyan risk grubunda olduğu görülmüştür. Ayrıca, öğrencilerin internet bağımlılığı, skorları, akıllı telefonları kontrol etme sıklıkları ve cinsiyete göre değiştiği, erkek öğrencilerin kız öğrencilere göre daha yüksek internet bağımlılığı, skorları, sahip oldukları görülmüştür. Tüm bunlara ek olarak, internet bağımlılığı, skorları ile günlük akıllı telefon kullanımı süreleri arasında anlamlı bir ilişki bulunmuştur. İnternet bağımlılığı, ve akıllı telefon kullanımı arasındaki ilişkileri ortaya koyan bu çalışma, her iki bağımlılık türü konusunda ne tür önlemler alınması gerektiği konusunda yol gösterici olacaktır.

Anahtar Sözcükler: *internet bağımlılığı, üniversite öğrencileri, cinsiyet, akıllı telefon kullanımı, nomofobi.*

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Introduction

Information and communication technologies, especially the web technologies have significantly changed our lives. Using it for very different purposes from searching to shopping or banking operations, the Internet has become an indispensable part of our life. According to Digital in 2017 Global Overview Report (2017), more than half of the world's population (3.770 billion people) utilizes the Internet. When we look at our country, 61.2% of all the population in Turkey has been defined as internet users and the Internet has been mostly used for social networking (82.4%), watching videos (74.5%), reading online news and journals (69.5%), searching information about health (65.9%), and about goods and services (65.5%) and listening to music (63.7%) (TUIK, 2016).

According to 2017 statistics, average daily use of Internet via computers and tablet PCs is 5 hours and 19 minutes (Digital in 2017: Global Overview, 2017). How an amazing statistic is this as we spend nearly a quarter part of a day online. Especially, adolescent and adult groups spend substantial time online, which is more than the time they spend for face to face relationships (Kuss, Griffiths, Karila & Billieux, 2014, T, nmaz, 2013). Instead of person to person communications, today's people prefer to communicate with friends and relatives online. Although it has several advantages, all substantial utilization of the Internet become source of severe problems. According to Young (1998), people are addicted to the Internet as if they are addicted to alcohol or drugs, which results in very hazardous effects in their academic, social and occupational life. Qulasvirta and Rattenbury (2011) describe the Internet addiction as "overuse due to loss of self-control" (p. 107). Similarly, Young (2007) listed some signs of the Internet addiction, such as high engagements with the Internet, unable to restrict the Internet usage, staying more time on Internet with every other entry, and being in a state of discomfort and anxiety when limiting online access.

The utilization of the Internet technologies has been increased with the emergency of smart characteristics of mobile phones. Currently, there was a high increase in the mobile technologies as %66 of all the world's population (4.92 billion people) is mobile phone owners (Digital in 2017: Gloal Overview Report, 2017). The faster mobile connections and easy access to mobile phones have led to an interesting result that there was a high increase in the number of people accessing web via mobile phones and more than half of the web pages have been served through mobile phones. Furthermore, according to 2017 statistics, most people use social media through their mobile phones as there are 2.56 billion mobile social media users in the world (Digital in 2017 Global Overview Internet Report, 2017).

Mobile phones can be used for a variety of purposes ranging from calling and messaging to playing games, surfing in the Internet and social networking. Today, there are very different mobile phone applications for games, social networking sites, shopping sites etc. According to Okazi and Hiroze (2009), large number of available applications on mobile phones promotes extensive usage of mobile phones. Facilitated by the widespread usage of mobile phones, we carry all these applications with us and we have a tendency to check them with every other notifications (Karaca, 2015). Allowing for anytime-anywhere Internet connections, the mobile phones lead to increased utilization of the Internet applications and so people becomes more prone to the hazardous effects of the Internet and mobile technologies. Furthermore, Hong, Chiu and Huang (2012) explained that the greater mobile phone usage is likely to lead to higher mobile phone addiction. Qualasvirta and Rattenbury (2011) stated that smart phones have a potential to form new habits related to the Internet use. For example, frequency of smart phone checking was called as a "checking habit", which means repetitively looking over the available content accessible on the mobile phones. The authors explained that "checking habits are automated behaviors where the device is quickly opened to check the standby screen or information content in a specific application" (Qualasvirta & Rattenbury, p. 107). These kinds of habits are important to be investigated as checking habits leads to an increase in the usage of mobile phones, and hence a possible increase in mobile phone addiction (Qualasvirta & Rattenbury, 2011; Salehan & Negahban, 2013).

In this study, the associations between university students' Internet addiction and their daily smart phone usage habits have been investigated. Although there has been extensive research about internet addiction, mobile phone addiction has received little attention from academicians. Furthermore, there are limited studies examining the possible relations between Internet addiction and mobile phone addiction. This study contributes to filling this gap by exploring how the utilization of mobile phones can be associated with addiction to the Internet. Furthermore, this study would be very valuable to explain why we are so addicted to our mobile phones and the reasons behind the over-use of mobile phones by young people. As young people are more likely to spend higher amount of time with mobile phones and the Internet than elder people, they might be more vulnerable to the Internet and mobile addiction (Bianchi & Philips, 2005, Kuss et al., 2014). Also, several studies indicate that younger people are more likely to use the Internet in a dysfunctional way and they have a tendency to face with more problems compared to older users (Stodt, Wegmann & Brand, 2016; Brenner, 1997). Thus, excessive use of the Internet is more likely to result in more problems among young people (Widyanto & Griffiths, 2006). Furthermore, most

smart phone addicts are also young people as they are extremely attached to their smart phones (Aljomaa, Qudah, Albursan, Bakhiet, & Abduljabbar, 2016; Walsh, White & Young, 2008). Examining the relations between the Internet addiction and smart phone usage, this study would be valuable in explaining both kinds of addictions among young students. The results of the study would provide some clues for the related governmental organizations about how to deal with these kinds of addictions by taking some preventive and corrective actions.

Method

A correlational research study was conducted to determine university students' Internet addiction levels and how it is associated to the students' daily smartphone usage. According to Gay, Mills and Airasian (2006) correlational research is useful in determining whether a relationship exists between two or more variables. Thus, this study aimed to explore if there is a relationship between the university students' Internet addiction scores, and their daily smart phone usage in hours and years of smart phone possession. This study further aimed to examine how students' Internet addiction scores differ based on the characteristics of gender, department, and frequency of smart phone checking. The below research questions form the basis of the study:

1. How frequently university students utilize the smart phones?
2. What are the university students' Internet addiction levels?
3. Do university students' Internet addiction scores significantly vary with respect to gender, department, and frequency of smart phone checking?
4. Is there a significant relationship between the university students' internet addiction scores and their daily smart phone usage in hours?
5. Is there a significant relationship between the university students' Internet addiction scores and years of smart phone possession?

Participants and Sampling

The sample of the study involved 298 university students at Faculty of Education in a state university in Istanbul, Turkey. As shown in Table 1, the data were collected from 5 different departments at the Education Faculty. As it was difficult to collect data from all these departments, a convenience sampling method was used to reach the participants available for the study (Frankel & Wallen, 2000). Some demographic information about the participants has been provided in Table 1.

Shown in Table 1, the sample of the study involved 298 university students. This study was very valuable in collecting data from 5 different departments, English language, Turkish language education, science education, social studies education, and computer education and instructional technologies department. As shown in Table 1, similar proportions of data were collected from each department. Also, most participant students were from 1st grade (38.3%) and 2nd grade (45%). The mean age of the sample was 19.95 ranging from 18 to 29 years.

Table 1.
Characteristics of Sample for the Study (n=298)

	n	%		
Gender				
Female	203			31.5
Male	94			68.2
Missing	1			0.3
Department				
English Language Education	70			23.5
Turkish Language Education	63			21.1
Science Education	53			17.8
Social Studies Education	55			18.5
Computer Education and Instructional Technologies	57			19.1
Grade Level				
1 st grade	114			38.3
2 nd grade	134			45.0
3 rd grade	32			10.7
4 th grade	13			4.4
Missing	5			1.7
Total	298			100
	Minimum	Maximum	M	SD
Age	18	29	19.95	1.58

Instrument

In this study, the data was collected by a survey involving three different parts. The first part of the survey involved some demographic questions such as department, gender, age and grade level. The second part of the survey included some questions about the university students' smart phone utilization, such as years of smart phone possession, duration of daily smart phone usage, frequency of smart phone checking. The final part of the study involved an Internet Addiction Scale developed by Gönüç and Kayri (2010). The authors assessed the factor structure of the scale using exploratory factor analysis. According to the results of this analysis, this scale consisted of four sub-factors: (1) withdrawal (11 items) (2) controlling difficulty (10 items), (3) disorder in functionality (7 items),

(4) social isolation (7 items). The internal consistency values for the subfactors were found .877, .855, .827, .791 respectively. Moreover, the internal consistency of the total scale was found to be very good ($\alpha = .94$). This 35 item 5-point likert-type scale assessed participants' rankings from 1 (strongly disagree) to 5 (strongly agree).

In this scale, the state of addiction has been defined in 3 groups: (1) non-addicted, (2) risky, and (3) addicted group. This scale has been rated by using median (Mdn) and standard deviation (SD). To rate the Internet addiction scale, a classification model of low (Mdn-SD), medium (Mdn), high (Mdn+SD) has been used (Gönüç & Kayri, 2010).

In the current study, the internal consistency value of the total scale was also found very high ($\alpha = .946$). Furthermore, the internal consistency values for subfactors were all higher than .80, showing good reliability estimates for the scale (Hair, Black, Babin, Anderson, & Tatham, 2006)

Data Analysis

Some descriptive statistics such as frequencies, percentiles, standard deviations, mean and median values have been used to analyze the data. Before conducting analysis, Kolmogorov-Smirnov and Shapiro-Wilk normality tests, histograms, Q-Q plots, skewness, and kurtosis were used to check the normality assumption for all the variables of this study. Examining these tests, there were some deviations from normality. Furthermore, a Kolmogorov-Smirnov test was used to test for normality on the main dependent variable, the Internet addiction score. Internet addiction scores of D (298) = .00, $p < .05$ were found, and does significantly deviate from normality. Therefore, as the data were not normally distributed, some non-parametric tests (Mann Whitney-U, Kruskal Wallis-H, Spearman's rho) were conducted to analyze the data.

Results

University Students' Smart Phone Utilization

The results of the study indicated that only 1 student did not have a smart phone. As shown in Table 2, the university students' years of smart phone possession ranged from 1 to 8 years with a mean value of 3.49 (SD=1.52). Moreover, the students' daily smart phone usage has been ranged from 1 to 16 hours with a mean of 4.48 hours (SD=2.88).

Table 2.
University Students' Smart Phone Usage

	Minimum	Maximum	M	SD
Years of Smart Phone Possession	1	8	3,49	1.52
Daily Smart Phone Usage in Hours	1	16	4,48	2,88

The students' smart phone checking habits have been shown in Table 3. Most students have a tendency to check their smart phones repetitively once in every 30 minutes (n=86, 28.9%), and once in every 1 hour (n=59, 19.8%). Moreover, 15.4% of the students check their smart phones once in every 10 minutes, and 15.8% of the students check their smart phones once in every 20 minutes. A small portion of students (n=25, 8.4%) check their mobile phones once in every 5 minutes and only 13 students (4.4%) check their smart phones once in every 3 hours.

Table 3.
University Students' Smart Phone Checking Habits

Frequency of Smart Phone Checking	n	%
Once in every 5 minutes	25	8.4
Once in every 10 minutes	46	15.4
Once in every 20 minutes	47	15.8
Once in every 30 minutes	86	28.9
Once in every 1 hour	59	19.8
Once in every 2 hours	20	6.7
Once in every 3 hours	13	4.4
Missing	2	.7
Total	298	100

University Students' Internet Addiction levels

As shown in Table 4, most of the participant students (n=128, 43%) belong to non-addicted group (M=54.297, SD=7.383). On the other hand, among the participants, 26.8% of the students (n=80) were addicted to the Internet (M=106.038, SD=13.123) and there were 90 risky students (30%), who were defined as potentially addicted to the internet (M=75.833, SD=6.411). The mean value of the total group is 74.691 (SD=22.93).

Table 4.
University StudentsøInternet Addiction Levels

	n	%	M	SD
Non-addicted	128	43.0	54.297	7.38
Risky	90	30.2	75.833	6.41
Addicted	80	26.8	106.038	13.12
Total	298	100	74.691	22.93

The Difference in the Internet Addiction Scores between Female and Male Students:

As shown in Table 5, a Mann-Whitney U test was conducted to determine the differences in the Internet addiction scores of female and male university students. Results of that analysis indicated that there was a difference, $z = -2.176$, $p < .05$ with male students have higher Internet addiction scores than females.

Table 5
Mann Whitney-U Test Results for Female and Male students

	Gender	n	Rank Avarage	Sum of Ranks	U	z	p
Internet Addiction Scores	Female	203	141.62	28749.50	85043.5	-2.176	.030
	Male	94	164.93	15503.50			
	Total	297					

The Difference between University StudentsøInternet Addiction Scores with respect to the Department

As shown in Table 6, Kruskal-Wallis H test results indicated that the university studentsøInternet addiction scores did not significantly differ with respect to their departments $\chi^2(4, N =298) = 6.92$, $p=.144$.

Table 6
Kruskal Wallis-H Test Results for different departments

	Department	n	Rank Avarage	χ^2	sd	p
Internet Addiction Score	English Language Education	70	159.65	6.845	4	.144
	Turkish Education	63	154.40			
	Science Education	53	160.96			
	Social Sciences Education	55	124.66			
	Computer Education and Instructional Technologies	55	144.92			
	Toplam	298				

The Difference between the Internet Addiction and Frequency of Daily Smart Phone Checking

The Kruskal-Wallis H test results have been shown in Table 7. The results indicated that the university students' Internet addiction scores significantly differed with respect to the frequency of their daily mobile phone checking, $\chi^2(6, N = 296) = 24.232, p = .00$. In order to examine the differences between groups, Man Whitney-U test was conducted among all the groups. According to these results, there was significant differences between 'once in every 5 minute' group and other 5 groups: 'once in every 20 minutes', 'once in every 30 minutes', 'once in 1 hour', 'once in 2 hours' and 'once in 3 hours' groups; with 'once in every 5 minutes' group have higher Internet addiction scores. Furthermore, 'once in every 10 minutes' group have significantly higher Internet addiction scores than 'once in every 1 hour', 'once in every 2 hours' and 'once in every 3 hours' groups.

Table 7.

Kruskal Wallis-H Test Results for the difference between Internet addiction and frequency of daily smart phone checking

	Frequency of daily mobile phone checking	n	Rank Avarage	χ^2	sd	p
Internet Addiction Score	Once in every 5 minute	25	200.42	24.232	6	.00
	Once in every 10 minute	46	176.58			
	Once in every 20 minute	47	148.21			
	Once in every 30 minute	86	148.34			
	Once in every 1 hour	59	124.44			
	Once in every 2 hours	20	115.00			
	Once in every 3 hours	13	112.12			
	Total	296				

The Relationships between the Internet Addiction Scores and Years of Smart Phone Possession

A Spearman's rho was run to determine the relationships between the university students' Internet addiction scores and duration of smart phone possession. The results indicated no significant correlations between university students' Internet addiction scores and duration of their smart phone possession ($r(296) = -.010, p = .867$).

The Relationships between the Internet Addiction and Daily Smart Phone Usage in Hours

A Spearman's Rho was run to determine relationships between Internet addiction scores and students' daily smart phone usage in hours. There was positive correlations between university students' Internet addiction scores and their daily smart phone usage in hours ($r(294)=.168, p=.004$).

Discussion

This study utilized correlational research methodology to determine university students' Internet addiction levels and how it is associated to their daily smartphone usage. The study results indicated that though many students (43%) belong to non-addicted group, 26.8% of the students belong to the Internet addicted group. Furthermore, 30% of the students have been defined as risky students, who have a potential to be addicted to the Internet. A similar study was conducted among university students in Jordan, indicated that 40% of the students were addicted to the Internet (Gamal, Alzayyat & Muayyad, 2017). These high Internet addiction rates might be an indication of the emergency of the need for establishing mental health programs for reducing and monitoring the Internet addiction among the university students. The Internet addiction rates have been increasing every other day with the widespread usage of mobile technologies, which allow anytime-everywhere connections. According to Digital 2017 report, there was a high increase in the utilization of mobile technologies as 66% of the all world's population has smart phones. Similarly, the study findings indicated that except for only one student, all the students had a smart phone. The easy access to smart phones and faster mobile connections has led to an increase in the number of people accessing web pages through mobile phones.

Furthermore, this study aimed to examine how students' Internet addiction scores differed based on the characteristics of gender, department, and frequency of smart phone checking. The study results showed that though the Internet addiction scores did not differ based on the department, it differed based on gender and frequency of smartphone checking. Although the participants of the study involved students from 5 different departments, their internet addiction scores did not change according to their departments. The results also revealed that male students have higher Internet scores than females. In the literature, there are many studies supporting this result that males have a tendency to have higher Internet addiction scores than females (Ak, Koruklu & Yılmaz, 2013; Xu, Shen, Yan, Hu, Yang, Wang, Kotha, Zhang, Ouyang, Zhang & Shen, 2012). This result might be associated with the usage patterns of the Internet with two different gender groups. For example,

males use the internet mainly for the purposes of entertainment and leisure, whereas females use it mainly for the purposes of educational assistance and interpersonal communication (Weiser, 2000). Also, males have a tendency to use the Internet more than females (Xu et al., 2012). Thus, males might be more prone to the hazardous effects of the Internet than females.

According to the study results, most students have a tendency to check their smart phones repetitively once in every 30 minutes (28.9%), and once in every 1 hour (19.8%). Moreover, 15.4% of the students check their smart phones once in every 10 minutes and 15.8% of the students check their smart phones once in every 20 minutes. A small portion of students (n=25, 8.4%) check their mobile phones once in every 5 minutes and only 13 students (4.4%) check their smart phones once in every 3 hours. These results suggest that the university students have a tendency to check their mobile phones frequently and so they are likely to spend a substantial time using these technologies. Moreover, the results indicated that the university students' Internet addiction scores significantly differed with respect to the frequency of their daily mobile phone checking. Follow up analysis showed that there were significant differences between the groups who check their mobile phone once in every 5 minutes and the other 5 groups who check their mobile phone repetitively once in every 20 minutes, in every 30 minutes, in every 1 hour, in every 2 hours and in every 3 hours, with the students who check their mobile phone repetitively once in every 5 minute has significantly higher scores. Furthermore, the students who repetitively check their mobile phones once in every 10 minutes have significantly higher Internet addiction scores than the students who repetitively check their mobile phone once in every 1 hour, in every two hours and in every 3 hours. Thus, it can be inferred from these results that the students who frequently check their mobile phones have a tendency to have higher Internet addiction scores. Facilitated by the widespread usage of mobile phones, we carry all these applications with us and we have a tendency to check them with every other notifications (Karaca, 2015). In the literature, the frequency of smart phone checking was called as a "checking habit", which means repetitively looking over the available content accessible on the mobile phones. Our study results indicated that the students who have more frequent checking habits have a tendency to have higher Internet addiction scores. As checking habits leads an increase in the usage of mobile phones, it is likely to lead a possible increase in mobile phone addiction levels of the university students (Qulasvirta & Rattenbury, 2011; Salehan & Negahban, 2013).

Also, this study aimed to explore if there is a relationship between the university students' Internet addiction scores and duration of smart phone possession. The study findings indicated no

significant correlations between university students' Internet addiction scores and duration of their smart phone possession. The study findings further indicated that the university students' years of smart phone possession ranged from 1 to 8 years with a mean value of 3.49. As the emergence of the first smart phones starts with 2007, the placement of smartphones in our life is a comparatively new happening and so this result is not surprising. Moreover, the university students' daily smart phone usage has been ranged from 1 to 16 hours with a mean of 4.48 hours. Actually, this result is somehow a surprising one as an American adult spends 2 hours and 51 minutes on their smartphone every day in average (Cross-Platform Future in Focus Report, 2017, March 31). These high usage hours of smart phones among our participant students might be because of that younger people spend more time with their mobile phones than the adults, and so they might be more vulnerable to the hazardous effects of mobile phones and the Internet (Bianchi & Philips, 2005).

Furthermore, the study results revealed that there were positive correlations between university students' Internet addiction scores and their daily smart phone usage in hours. This result is not a surprising one as there is a high increase in the number of people accessing web via mobile phones and more than half of the web pages has been served through mobile phones (Digital in 2017: Global Overview, 2017). Today, there are very different mobile Internet applications for games, social networking sites, shopping sites etc. According to Okazi and Hiroze (2009), a variety of available applications on mobile phones promotes extensive usage of Internet via mobile phones. Allowing for anytime-anywhere Internet connections, the mobile phones lead to increased utilization of the Internet applications and so people becomes more prone to the hazardous effects of the Internet and mobile technologies. Salehan and Negahban (2013) found that the use of mobile social networking applications is a significant predictor of mobile phone addiction. Furthermore, Hong, Chiu and Huang (2012) explained that the greater mobile phone usage is likely to lead to higher mobile phone addiction. As the study results indicated a positive association between the Internet addiction and mobile phone usage, it might be a good idea to consider these addictions to the Internet and mobile phones together. Some precautions should be taken to minimize the hazardous effects of both addiction types among university students.

Conclusions

In this study, the relations between university students' Internet addiction and their daily smart phone usage have been investigated. Although there has been extensive research about the Internet addiction, mobile phone addiction has received little attention from the academicians. Furthermore,

there are limited studies examining the possible associations between the Internet addiction and mobile phone usage. This study contributes to filling this gap by exploring how the utilization of mobile phones can be associated with the addiction to the Internet. This study would be very valuable in explaining why we are so addicted to our mobile phones and the reasons behind the over-use of mobile phones by young people. Especially, adolescents spend substantial time online, which is more than the time they spend for face to face relationships (Kuss, Griffiths, Karila and Billieux, 2014; T,nmaz, 2013). As younger people are more likely to spend higher amount of time with mobile phones and the Internet than older people, they might be more vulnerable to the Internet and mobile phones (Bianchi & Philips, 2005). Supporting this idea, the current studies indicate that mobile phone addiction is also very frequent among young people as they are extremely attached to their smart phones (Aljomaa et al., 2016; Walsh, White & Young, 2008). Furthermore, younger people have a tendency to experience more addiction problems compared to older users (Brenner, 1997; Stodt et al., 2016), so excessive use of the Internet is likely to result in serious problems among young people (Widyanto & Griffiths, 2006). Thus, it is important to investigate these kinds of addictions among young people. Examining the associations between university students' Internet addiction and their daily smart phone usage, this study would be valuable in explaining both kinds of addictions among the university students. The results of the study would provide some clues for the related governmental organizations about how to deal with these addiction types by taking some preventive and corrective actions. As this study is only limited to university students, some further studies should also be conducted with different groups of people, such as children and adults. Understanding the associations between the Internet addiction and mobile phone usage will enhance our understanding of developing mechanisms for dealing with both the Internet and mobile phone addictions among young people.

References

- Al-Gamal, E., Alzayyat, A., & Ahmad, M. M. (2016). Prevalence of Internet addiction and its association with psychological distress and coping strategies among university students in Jordan. *Perspectives in Psychiatric Care*, 52(1), 49-61.
- Aljomaa, S. S., Qudah, M. F. A., Albursan, I. S., Bakhiet, S. F., & Abduljabbar, A. S. (2016). Smartphone addiction among university students in the light of some variables. *Computers in Human Behavior*, 61, 155-164.
- Ak, ., Koruklu, N., & Y,lmaz, Y. (2013). A study on Turkish adolescent's Internet use: possible predictors of Internet addiction. *Cyberpsychology, Behavior, and Social Networking*, 16(3), 205-209.

- Brenner, V. (1997). Psychology of computer use: XLVII. Parameters of Internet use, abuse and addiction: the first 90 days of the Internet Usage Survey. *Psychological Reports*, 80(3), 879-882.
- Class Platform Future in Focus Report (2017, March 31). *Mobile Matures as the Cross-Platform Era Emerges*. Retrieved August 4, 2017, from <http://www.comscore.com/Insights/Blog/Mobile-Matures-as-the-Cross-Platform-Era-Emerges>
- Digital in 2017: Global Overview (2017, January 24). Retrieved August 3, 2017, from <https://wearesocial.com/special-reports/digital-in-2017-global-overview>
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hong, F. Y., Chiu, S. I., & Huang, D. H. (2012). A model of the relationship between psychological characteristics, mobile phone addiction and use of mobile phones by Taiwanese university female students. *Computers in Human Behavior*, 28(6), 2152-2159.
- Karaca, F. (2015). Undergraduate students' purposes of utilizing social networks: A survey research. *European Journal of Research on Education*, 3(2), 50-57.
- Okazaki, S., & Hirose, M. (2009). Does gender affect media choice in travel information search? On the use of mobile Internet. *Tourism Management*, 30(6), 794-804.
- Oulasvirta, A., Rattenbury, T., Ma, L., & Raita, E. (2012). Habits make smartphone use more pervasive. *Personal and Ubiquitous Computing*, 16(1), 105-114.
- Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behavior*, 29(6), 2632-2639.
- Stodt, B., Wegmann, E., & Brand, M. (2016). Predicting Dysfunctional Internet Use: The Role of Age, Conscientiousness, and Internet Literacy in Internet Addiction and Cyberbullying. *International Journal of Cyber Behavior, Psychology and Learning (IJCBPL)*, 6(4), 28-43.
- TUIK (2016, August 18). *Hanehalk, Bili im Teknolojileri Kullanma Ara t,rmalar*. Retrieved August 3, 2017, from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=21779>.
- Walsh, S. P., White, K. M., & Young, R. M. (2008). Over-connected? A qualitative exploration of the relationship between Australian youth and their mobile phones. *Journal of Adolescence*, 31(1), 77-92.
- Weiser, E. B. (2000). Gender differences in Internet use patterns and Internet application preferences: A two-sample comparison. *CyberPsychology & Behavior*, 3(2), 167-178.
- Young, K. S. (2007). Cognitive behavior therapy with Internet addicts: treatment outcomes and implications. *CyberPsychology & Behavior*, 10(5), 671-679.
- Young, K. S. (2004). Internet addiction: A new clinical phenomenon and its consequences. *American Behavioral Scientist*, 48(4), 402-415.
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology & Behavior*, 1(3), 237-244.
- Xu, J., Shen, L. X., Yan, C. H., Hu, H., Yang, F., Wang, L., & Ouyang, F. X. (2012). Personal characteristics related to the risk of adolescent Internet addiction: A survey in Shanghai, China. *BMC Public Health*, 12(1), 1106.

Uzun Özet

Bilgi ve ileti im teknolojilerinde meydana gelen h,zl, geli melerle birlikte, bu teknolojiler ve özellikle de internet günlük ya ant,m,z,n ayrılmaz bir parçası haline gelmiştir. Dijital 2017 Küresel Geli im Raporu (2017) incelendi inde dünya nüfusunun yar,s,ndan fazlas,n,n günlük ya am,nda interneti kullanmay, tercih etti i görülmektedir. Ülke baz,nda bak,ld, ,nda, Türkiyeødeki nüfusun %61.2øinin internet kullan,c,s, oldu u görülmektedir (TU K,2016). Türkiye genelinde internet kullan,m amaçları, incelendi inde ise ülke nüfusunun %82.4øinin interneti sosyal medya kullan,m amaçlı,, %74.5øinin video izleme amaçlı,, %69.5øinin gazete ve dergi okuma amaçlı,, %65.9øunun sa l,kla ilgili bilgi arama amaçlı, ve %65.5øinin mal ve hizmetler hakk,nda bilgi arama amaçlı, ve son olarak %65.5øinin ise interneti müzik dinleme amaçlı, olarak kulland, , görülmektedir.

Dijital 2017 Küresel Geli im Raporu (2017) istatistiklerine göre bilgisayar ve tabletler üzerinden günlük ortalama internet kullan,m süresinin 5 saat 19 dakika oldu u görülmektedir. Buradan da anla ,ld, , üzere günümüzün neredeyse 4øe birini internette geçirmekteyiz. Bu durum özellikle gençler için çok daha can s,k,c,d,r. Nitekim, gençler arkadaş lar,yla yüz yüze zaman geçirmek yerine internet üzerinden ileti im kurmay, tercih etmektedirler. nternet kullan,m,n,n gençler üzerinde bir çok olumlu yönleri oldu u gibi di er taraftan a ,r, internet kullan,m, çok ciddi sorunlara yol açmaktadır. Young (1998)ø göre insanlar aynen alkol ya da ilaçlara ba ,ml, oldukları gibi internete de ba ,ml, hale gelmektedirler ve bu durum ki ilerin akademik, sosyal ve i ya amlar,nda çok ciddi problemlere yol açmaktadır. Qulasvirta ve Rattenbury (2011) internet ba ,ml,l, ,n, internetin ki inin kendi kontrolünü kaybedecek boyutta a ,r, kullan,m, olarak tanımlam, t,r. nternet ba ,ml,l, ,na dair bazı semptomlar, listeleyen Young (1998) ise internette çok fazla zaman geçiren, internet kullan,m,n, s,n,rland,rmakta güçlük çeken, internete her giri inde daha uzun süre kalan ve online eri imi k,s,tland, ,nda kendini huzursuz ve kayg,l, hisseden ki ilerin internet ba ,ml,s, olarak tanımlanabilece ini belirtmiştir.

Çal, man,n Amacı,

Bu çal, mada üniversite ö rencilerinin internet ba ,ml,l, , düzeylerinin belirlenmesi ve internet ba ,ml,l, , ile ö rencilerin mobil telefon kullan,mı, arasındaki ili kilerin tespit edilmesi amaçlanm, t,r. Buna ek olarak, internet ba ,ml,l, , skorları,n,n ö rencilere ait cinsiyet, bölüm gibi özellikler ile günlük mobil telefon kontrol etme s,kl,klar,na göre de i ip de i medisine bak,lm, t,r. Çal, man,n ara tırma soruları, a a ,da belirtildi i gibidir:

1. Üniversite ö rencileri ak,ll, telefonlar, hangi s,kl,ktaki kullanılmaktadırlar?

2. Üniversite öğrencilerinin internet kullanım, düzeyleri nelerdir?
3. Üniversite öğrencilerinin internet kullanım, skorlar, cinsiyet, bölüm ve günlük kullanım, telefon kontrol etme sıklıklar,na göre anlamlı bir şekilde de ği mekte midir?
4. Öğrencilerin internet kullanım, skorlar, ile günlük kullanım, telefon kullanma süreleri arasında anlamlı bir ilişki var mıdır?
5. Öğrencilerin internet kullanım, skorlar, ile kullanım, telefona sahip olma süreleri arasında anlamlı bir ilişki var mıdır?

Bu çalış,manın örneklem grubu İstanbul'da bir devlet üniversitesinin E İtim Fakültesinde okuyan 298 öğrenciden oluş,maktadır. Kolay erişilebilirlik yöntemi kullanılarak oluşturulan örneklem grubu İngilizce, Türkçe, Fen Bilgisi, Sosyal Bilgiler ve Bilgisayar ve Öğretim Teknolojileri E İtimi bölümleri olmak üzere 5 farklı bölümden öğrenciler içermektedir.

İki kişisel tarama deseninin kullanıldığı, bu çalış,ma veriler 3 kısımdan oluşan bir anket aracılığı, ile toplanmıştır. Anketin ilk kısmı, bölüm, cinsiyet, sınıf seviyesi gibi demografik bilgiler içermektedir. İkinci bölümü üniversite öğrencilerinin kullanım, telefon kullanma, ile ilgili sorular içermektedir. Üçüncü bölümü ise Gönüç ve Kayri (2010) tarafından geliştirilmiş olan İnternet Kullanım Ölçe ği içermektedir. 35 maddeden oluşan bu ölçe ğin güvenirlik katsayısı, .94 olarak bulunmuştur.

Bulgular

Çalış,ma sonuçları, incelendi ğinde üniversite öğrencilerinin kullanım, telefon kullanma sürelerinin 1 ve 8 yıl arasında de ğişimi ve ortalama kullanım, telefon kullanma sürelerinin 3.49 yıl olduğu görülmüştür. Öğrencilerin günlük kullanım, telefon kullanma sürelerinin ise 1 ve 16 saat arasında de ğişimi ve ortalama günlük kullanım, telefon kullanma sürelerinin 4.48 saat olduğu görülmüştür. Öğrencilerin kullanım, telefon kontrol etme sıklıklar,na bakıldığında ise bir çok öğrencinin kullanım, telefonları, her 30 dakikada bir (n=86, %28.9), ya da saat başı, (n=59, %19.8) kontrol etti ği görülmüştür.

Öğrencilerin internet kullanım, düzeylerine bakıldığında ise öğrencilerin %43'ü kullanım, olmayan grupta yer alırken, %26.8'i kullanım, grupta, %30'u ise risk grubunda yer almaktadır. İnternet kullanım, cinsiyet, bölüm ve kullanım, telefon kontrol etme sıklıklar, gibi de ğişkenlere göre de ğişim de ğişiminde bakıldığında bölüme göre İnternet kullanım, de ğişiminde de ğişim, ancak de ğişim iki de ğişimene göre de ğişim görülmüştür. Cinsiyet de ğişimine göre bakıldığında erkek öğrenciler lehine bir de ğişim olduğu ortaya çıkmıştır. Buna ek olarak, öğrencilerin kullanım, telefon kontrol etme sıklıklar,na göre de İnternet kullanım, skorlar, de ğişiminde olup, kullanım, telefonları, her 5 dakikada

bir kontrol eden öğrencilerin internet kullanım, skorları, telefonunu her 20 dakikada bir, her 30 dakikada bir, her saat başı, her 2 saatte bir ve her 3 saatte bir kontrol eden gruplara göre daha yüksek olduğu görülmüştür. Benzer şekilde, telefonunu her 10 dakikada bir kontrol eden öğrencilerin internet kullanım, skorları, telefonları, her saat başı, her 2 saatte bir ve her 3 saatte bir kontrol eden gruba göre daha yüksek olduğu görülmüştür.

Tüm bu sonuçlara ek olarak bu çalışmada, amaçlar, dahilinde öğrencilerin internet kullanım, ile akıllı telefona sahip olma süreleri ve günlük akıllı telefon kullanma süreleri arasında anlamlı bir ilişki olup olmadığına bakılmıştır. Öğrencilerin akıllı telefona sahip olma süreleri ile anlamlı bir ilişki bulunamazken, öğrencilerin günlük akıllı telefon kullanma süreleri ile internet kullanım, skorları arasında anlamlı bir ilişki bulunmuştur.

Tartışma ve Sonuç

Üniversite öğrencilerinin internet kullanım, düzeylerinin belirlenmesi ve internet kullanım, düzeyleri ile çeşitli davranışlar arasındaki ilişkilerin belirlenmesi amacıyla yapılan bu çalışmada veri toplama aracı olarak anket kullanılmıştır. Çalışma sonuçları incelendiğinde çoğu öğrenci bağımlı olmayan grupta (%43) yer alırken, bağımlı grupta (%26.8) ve riskli grupta (%30) yer alan öğrencilerin sayısı da hiç yadsınmayacak kadar çoktur. Güncel çalışmalar incelendiğinde üniversite öğrencilerinin internet kullanım, düzeyinin her geçen gün arttığı görülmektedir. Mobil teknolojilerin ve özellikle akıllı telefonların hayatımıza girmesiyle birlikte internete her yerden ve her zaman kolaylıkla ulaşabilmekte ve böylelikle internete her geçen gün daha bağımlı hale gelmekteyiz. İnternet kullanım, düzeyindeki bu tarz yüksek oranlar üniversite öğrencileri arasında internet kullanım, azaltmak adına bir dikkat edilmesi gerekenlerdir. Bu nedenle, çalışmaların sonuçları incelenerek çeşitli önlemler alınması gerekmektedir.

Literatürde internet kullanım, ile ilgili birçok araştırma bulunduğundan internet kullanım, ile mobil telefon kullanımı arasındaki ilişkiye çok fazla bakılmamıştır. Bu araştırmada elde edilen bulgular bu eksikliği gidermek anlamında faydalı olacaktır. Ayrıca, bu çalışmada cep telefonlarına neden bu denli bağımlı oldukları ve bu bağımlıktan kurtulmak için neler yapabilecekleri konusunda bize yol gösterici olacaktır.